

REMARKS

It should be noted that in the description of the invention a drawback of the prior syringes used in dental practice is that the gutta percha material is heated to a plastic state in the syringe and although the plunger ejects the major part of the heated material into the needle there is always some remnants that remain in the syringe chamber which must be thoroughly cleaned out before the plunger in the syringe can be used again.

The patent to Marlin discloses a hollow needle having two portions where are connected to an injection device 80 having a heating system [percha] therein for maintaining the gutta percha material in a plastic state. The heated material is ejected from the passageway 84 in the injection device 80 and is forced through the needle 10. It should be apparent that some remnants of the heated material will remain in the passageway after being injected in the cavity, which has to be cleaned. This is a difficult job especially if the Thermoplastic material cools down.

The patent to Botich et al. is directed to a hypodermic injection system with a retractable needle to protect health care providers, but the needle does not have a chamber for an open-ended cartridge for thermoplastic or other materials for injection, and needle with the chamber being for a single use.

The other cited patents to Brandhorst, Osborne, Fischer and Berke do not show a needle for use with a syringe that is a unitary device having a cartridge with material to be expelled in the needle and which is disposable as a unit. In conclusion, applicant has overcome the problem of having a dischargeable material in the syringe housing the plunger by the present construction.

The specification has been amended in order to clarify the same without adding new matter and to address the objections under 35 U.S.C. Section 112, in paragraph 1 of page 2 of the above-noted Office Action. Specifically, the two part needle is identified as having a front section 10a and a rear section 10b

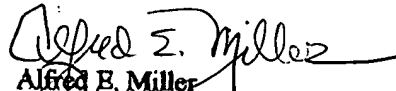
and further stating that the forward end 21 of the ram 19 forces the thermoplastic material in the open ended cartridge through the nozzle, rear section 10a and the front section 10b and into the cavity to be obdurated.

New claim 15 now sets forth the invention as a disposable needle that is attached to a syringe. The needle has an open ended cartridge that is filled with heated thermoplastic material, such as gutta percha, that is located in a chamber in the rear section of the needle of such size and dimension as to accommodate the cartridge. The needle is for one time usage, and can be safely discarded after use.

In order to overcome the aforesaid problem the present invention contemplates the use of a needle which itself houses the thermoplastic material in a cartridge forming a combination needle and thermoplastic material, that after use is disposable leaving the syringe with plunger clean and capable of multiple use without cleaning.

In view of the foregoing, it is believed that the new independent claim, as well as the remaining claims are in allowable condition, and such action is solicited.

RESPECTFULLY SUBMITTED,



Alfred E. Miller

USPTO Reg. No. 16,548

Attorney for Applicant

406 West Putnam Avenue

Greenwich, CT 06830

(203) 661-1900

Dated: Mar. 14, 2006